Dipartiment tal-Kura Primarja

SPEECH-LANGUAGE DEPARTMENT
Ingiered Road, Luqa LQA 3301, Malta

Technology as a means of speech and language enhancement

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Speech and Language Pathology

- Speech Language Pathology is the study, diagnosis, and treatment of human communication disorders, literacy, voice and swallowing dysfunctions.

- Speech pathologists, assist clients/patients (adults and children) who are unable to speak clearly or properly, have communication impairments such as attention, memory, and problem-solving disorders, fluency disorders, literacy difficulties, an unsuitable pitch, have problems understanding language; and they work with those who have trouble swallowing.

- Address issues in individuals who suffer some kind of trauma or whose condition is of the developmental type.
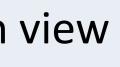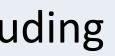
Focus of treatment	Mechanistic view of language	Pragmatics	Functional interactive communication and Preparation for learning, living and working	Outcomes Quality Efficacy
Speech language pathologist role	Specialist model	Expert model	Collaborative – consultative model	Facilitator of the service delivery
Guided by merging issues	The focus on Language	Language and learning are linked	Inclusion transition efficacy Accountability outcomes	To be decided in view of change in Landscapes including technological revolution.
	Syntax/Grammar Semantics phonology	Content form use	Communication learning collaboration	Content providers activities

Technology and Communication Aids

- Over the years, there have been a number of big advancements in speech language pathology. These advancements now enhance habilitation/rehabilitation progression.

- Augmentative and Alternative communication systems help augment or substitute verbal speech.

- The system can be Low Tech or High Tech depending on what the assessment indicates.

Computer Technology and SLP

- Computer technology has become a regular part of recent speech and language therapy techniques.

- There are software programs that provide audiovisual exercises to help patients in their speech therapy sessions both in the clinic and at home.

- There are voice, video, sound, and text software programs and assessment.

- As well as software designed for cognitive training for such problems as attention and memory.

Areas influenced by Technological Visual Modes of Communication:

- Errors of auditory discrimination are corrected

- Early attempts of speech containing gross immaturities of articulation could be understood

- Earlier success at communication

- A wider variety of grammatical constructions appear in the child's speech

- As a memory aid to language

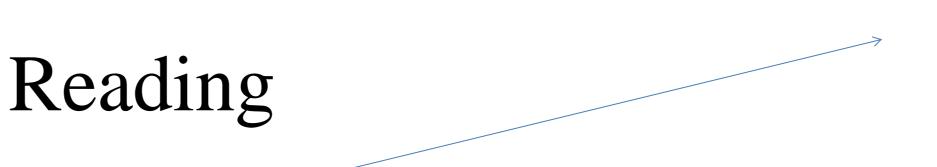- Compensation to temporary hearing loss

Speaking   Memory

Reading

In typically developing children these skills are interlinked and one area influences the other.

This informs the practice of teaching children with learning disability.

Children with learning disability are not able to learn language by

Listening

They learn it more by

Seeing

Reading improves their Speech and the use of technology motivates the student

Typical children speak before they read

This helps them to acquire reading by:

1. knowing the name of an object in a picture
2. guessing the printed word below it
3. guessing unfamiliar words in a sentence

The opposite can happen and this informs therapy with individuals with learning disability

The child sees a new word, learns what it means and then uses it in speech.

Application of Speech Technologies

- make up for expensive or unavailable human expertise
- help users who need assistance understanding or producing spoken language, remembering or reading.
- systematically analyze voice quality, level of communication, language skills etc
- Using text to speech for literacy enhancement
- Translate from speech to sign (Maltese sign language)
- Tech with EI to enhance language and develop

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Clinical Applications

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Technology and Communication

Technology, for the most part, contributes to the betterment of society. In the realm of education, technology has become an integral part of the system. Educators from all over the nature are using technology in their repertoire to enhance classroom learning.

Among the many benefits is that technology provides access to education for everyone, but in particular, technological advancements have opened education more than ever to learners with disabilities, such as those with speech and language difficulties.

iTherapy

capitalizes on the latest technologies that are available in an therapy environment as a modality to meet goals implemented by the IEP team

Fortunately, software and applications is readily available from places such as the app store or the Google store. In fact there are over three hundred thousand apps with more added on a daily basis.

You can use apps individually or combine them to achieve goals. Whether you are using voice output, building vocabulary, correcting articulation, or strengthening muscle coordination, any of these devices make it easier, more fun, and reinforcing.

Therapy

- In addition, learning goes on long after the therapy session has ended.

- Unlike other computer-based therapies, students can take their tablets wherever they go, thus allowing them to engage in learning whenever the opportunity presents itself, and alas they also can be cool.

Best Practices

1   **Have a clear focus on the individual needs.** Educators and caregivers should clearly understand and commit to common goals based on the individual's unique needs and abilities.

1   **Maintain high standards and expectations for al individuals to succeed.** Assume that each and every individual can learn how to use technology in a capacity that is relevant to them. Individuals can achieve great success when standards of performance are made clear, consistent, and all members of the team are dedicated to helping every individual achieve his or her goal.

2   **Consider the individual's environments and the skills needed to function in those environments.** Home, school, community etc. present variable challenges We need to consider what set of skills an individual needs to participate and be productive in each environment. In essence, we should draw upon the entire community to foster student achievement.

Best Practices

4. What are the appropriate tools, gadgets, devices, apps, programs, and accessories that can be effectively accessed by an individual?

Consideration must be given to the individual's vision, motor planning, attention, sensory processing, memory and cognitive ability to provide the most effective tools for success.

Best practices

Last and perhaps most important, teach turn-taking or you may not get your device back.

"My turn, Your Turn" works extremely well in teaching turn-taking techniques. And always take your turn first, to set a good example. The most challenging students will hand over the device when I announce 'It's my turn'.

Time limits and timers also work well as short, task-oriented activities.

Kura
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SPEECH-LANGUAGE TRAINING COURSES 2013

Course	Dates	Venue	Bookings
ASD apps for iPads $^{NEW!}$	9th July	MCH	veronica.montanaro@gov.mt
Communication apps for iPads $^{NEW!}$	4th June	MCH	charonia.aquilina@gov.mt
Introduction to Autism Spectrum Disorders	12th June / 9th October	MCH	daniela.delia@gov.mt
Facilitating language through play for parents & teachers	10th July / 11th December	MCH	michelle.bugeja@gov.mt
Feeding and swallowing disorders in children	7th August	MCH	alexandra.ameen@gov.mt
Feeding and swallowing disorders in adults	21st August	MCH	alexandra.ameen@gov.mt
Introduction to Picture Exchange Communication Systems	3rd July / 4th July	SLD	daniela.delia@gov.mt
Key word signing	15th July / 16th September	MCH	graziella.connell@gov.mt
Literacy apps for iPads $^{NEW!}$	5th July	MCH	christina.chetcuti@gov.mt
Social communication skills	11th September	MCH	daniela.delia@gov.mt
Supporting children with autism in the classroom	4th September	MCH	kirsten.m.pulis@gov.mt
Taking care of your voice	23rd July / 12th November	MCH	norma.camilleri@gov.mt
Using communication systems effectively	5th June	MCH	charonia.aquilina@gov.mt
Visual aids & social stories	3rd September	MCH	kirsten.m.pulis@gov.mt

Other SLD courses offered on request:
- Augmentative and alternative communication (AAC)
- Communicating through the arts
- Stuttering: straight talk for teachers
- The child who stutters: To the healthcare provider
- Total communication

For more information about the workshops delivered by the speech and language department the website is http://www.speechlanguage.gov.mt

Microsoft
Innovation Centre

mita
MALTA INFORMATION TECHNOLOGY AGENCY

Institute of
Computer
Education

Training workshops

- Parents and educators are constantly looking for new tools to help children meet their potential. The number of available applications is overwhelming.

- Whilst there are many technological tools available, there are also several applications (apps) designed to meet the needs of children on the Autism Spectrum Disorder (ASD), Literacy difficulties and communication difficulties.

Workshops

- ASD and Apps: The workshop highlights a few of the educational applications that are suitable for children presenting with ASD. Ways on keeping up-to-date with new applications will also be addressed.

- Literacy Apps:The workshop highlights a few applications for students to improve their skills not only in reading, writing, and spelling, but also get a boost in confidence and learn to see school as a fun, engaging activity.

- Communication Apps: highlight a few applications that are available as communication tools.

Thank you for your attention